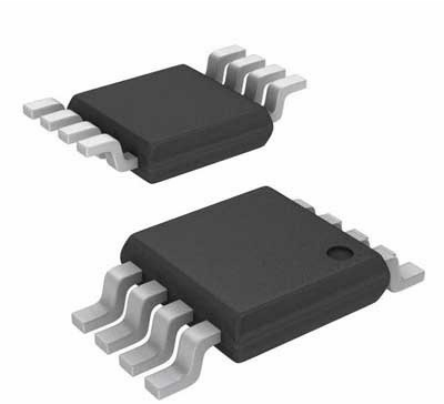
# LTC2053IMS8#PBF

Data Sheet

INSTRUMENT AMPLIFIER, 200KHZ, 118DB MSOP-8, No. of Amplifiers:1, Input Offset Voltage:20 V, Slew Rate:0.2V/ s, Bandwidth:200kHz, Supply Voltage Range:2.7V to 5.5V, Amplifier Case Style:MSOP

| | |
|---|---|
| Manufacturers | Analog Devices, Inc |
| Package/Case | MSOP-8 |
| Product Type | Amplifier ICs |
| RoHS | Pb-free Halide free |
| Lifecycle | |



Images are for reference only

Please submit RFQ for LTC2053IMS8#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

## General Description

The LTC2053 is a high precision instrumentation amplifier. The CMRR is typically 116dB with a single or dual 5V supply and is independent of gain. The input offset voltage is guaranteed below 10µV with a temperature drift of less than 50nV/°C. The LTC2053 is easy to use; the gain is adjustable with two external resistors, like a traditional op amp.

The LTC2053 uses charge balanced sampled data techniques to convert a differential input voltage into a single ended signal that is in turn amplified by a zero-drift operational amplifier.

The differential inputs operate from rail-to-rail and the single-ended output swings from rail-to-rail. The LTC2053 can be used in single-supply applications, as low as 2.7V. It can also be used with dual ±5.5V supplies. The LTC2053 requires no external clock, while the LTC2053-SYNC has a CLK pin to synchronize to an external clock.

The LTC2053 is available in an MS8 surface mount package. For space limited applications, the LTC2053 is available in a 3mm × 3mm × 0.8mm dual fine pitch leadless package (DFN).

## Features

116dB CMRR Independent of Gain

Maximum Offset Voltage: 10µV

Maximum Offset Voltage Drift: 50nV/°C

Rail-to-Rail Input

Rail-to-Rail Output

2-Resistor Programmable Gain

Supply Operation: 2.7V to ±5.5V

Typical Noise: 2.5µVP-P (0.01Hz to 10Hz)

Typical Supply Current: 750µA

LTC2053-SYNC Allows Synchronization to External Clock

Available in MS8 and 3mm × 3mm × 0.8mm DFN Packages

## Application

Thermocouple Amplifiers

Electronic Scales

Medical Instrumentation

Strain Gauge Amplifiers

High Resolution Data Acquisition

### Related Products

LTC1151CSW#PBF

Analog Devices, Inc

SOIC-16

LT1498CS8

Analog Devices, Inc

SOP-8

LTC2053CMS8

Analog Devices, Inc

MSOP8

LTC1150CN8

Analog Devices, Inc

DIP8

LT1491ACS

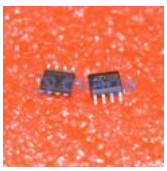
Analog Devices, Inc

SOP14

LT6105IMS8

Analog Devices, Inc

MSOP-8



LTC1150CS8

Analog Devices, Inc

SOP8

LT1013CN8

Analog Devices, Inc

DIP-8